**Amendments to the Claims**:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

**Listing of Claims**:

1-5. (Canceled)

6. (Currently Amended) A composition, comprising a therapeutically effective amount of the molecule of claim ~~36~~ 48 and at least one pharmaceutically acceptable carrier.

7. (Currently amended) A composition, comprising a therapeutically effective amount of an immunoglobulin according to claim ~~36~~ 48 that binds to A34 and is conjugated to an anti-cancer agent, and at least one pharmaceutically acceptable carrier.

8-24. (Canceled)

25. (Currently amended) The immunoglobulin molecule of claim ~~36~~ 48, wherein said immunoglobulin molecule is humanized.

26. (Currently amended) The immunoglobulin molecule of claim ~~36~~ 48, wherein said immunoglobulin molecule is fully human.

27. (Currently amended) The immunoglobulin molecule of claim ~~36~~ 48, wherein said immunoglobulin molecule is recombinant.

28. (Currently amended) An immunoglobulin molecule according to claim ~~36~~ 48 that binds to A34 and is conjugated to at least one anti-cancer agent.

29. (Previously presented) The immunoglobulin molecule according to claim 28, wherein said anti-cancer agent is selected from the group consisting of radioisotopes, chemotherapeutic agents, cytotoxic agents and combinations thereof.

30. (Previously presented) The immunoglobulin molecule according to claim 29, wherein said anti-cancer agent is a radioisotope selected from the group consisting of $^{125}I$, $^{131}I$, $^{99}Tc$, $^{90}Y$ and $^{111}In$.

31. (Previously presented) The immunoglobulin molecule according to claim 28, wherein said anti-cancer agent comprises a chemotherapeutic agent or cytotoxic agent selected from the group consisting of QFA, antifolates, BCNU (carmustine), mercaptopurine, methotrexate, docetaxel, adriamycin, calicheamicin cellular toxin, bacterial toxin, pseudomonas exotoxin, ricin, diptheria toxin and combinations thereof.

32-34. (Canceled)

35. (Currently amended) The substantially pure immunoglobulin molecule according to claim ~~36~~ 48, where the immunoglobulin molecule binds to an extracellular portion of A34.

36-44. (Canceled)

45. (Currently amended) ~~The substantially pure immunoglobulin molecule according to claim 36 comprising~~ A substantially pure immunoglobulin molecule which binds specifically to A34 antigen, wherein said immunoglobulin molecule comprises at least one heavy chain variable region selected from SEQ ID NO: 23, SEQ ID NO: 27, and SEQ ID NO: 31.

46. (Currently amended) ~~The substantially pure immunoglobulin molecule according to claim 36 comprising~~ A substantially pure immunoglobulin molecule which binds specifically to A34 antigen, wherein said immunoglobulin molecule comprises at least one light chain variable region selected from SEQ ID NO: 21, SEQ ID NO: 25, and SEQ ID NO: 29.

47. (Currently amended) ~~The substantially pure immunoglobulin molecule according to claim 36 comprising~~ A substantially pure immunoglobulin molecule which binds specifically to A34 antigen, wherein said immunoglobulin molecule comprises:

at least one heavy chain variable region selected from SEQ ID NO: 23, SEQ ID NO: 27, and SEQ ID NO: 31; and

at least one light chain variable region selected from SEQ ID NO: 21, SEQ ID NO: 25, and SEQ ID NO: 29.

48. (New) A substantially pure immunoglobulin molecule which binds specifically to A34 antigen wherein said immunoglobulin molecule comprises at least one light chain variable region and at least one heavy chain variable region, wherein said heavy chain variable region comprises a CDR3 region consisting of the sequence of SEQ ID NO: 37 or SEQ ID NO: 49.

49. (New) The immunoglobulin molecule of Claim 48 comprising at least one light chain variable region, wherein the light chain variable region comprises a CDR3 region consisting of the sequence of SEQ ID NO: 34 or SEQ ID NO: 46.

50. (New) The immunoglobulin molecule of Claim 48 wherein the heavy chain variable region comprises a CDR1 region consisting of a sequence selected from SEQ ID NO: 35, SEQ ID NO: 41 and SEQ ID NO: 47, and a CDR2 region consisting of the sequence of SEQ ID NO: 36 or SEQ ID NO: 48.

51. (New) The immunoglobulin molecule of Claims 48 or 49 wherein the light chain variable region comprises a CDR1 region consisting of a sequence selected from SEQ ID NO: 32, SEQ ID NO: 38 and SEQ ID NO: 44, and a CDR2 region consisting of the sequence of SEQ ID NO: 33 or SEQ ID NO: 45.

52. (New) A composition, comprising a therapeutically effective amount of the molecule of claim 45 and at least one pharmaceutically acceptable carrier.

53. (New) A composition, comprising a therapeutically effective amount of an immunoglobulin according to claim 45 that binds to A34 and is conjugated to an anti-cancer agent, and at least one pharmaceutically acceptable carrier.

54. (New) The immunoglobulin molecule of claim 45, wherein said immunoglobulin molecule is humanized.

55. (New) The immunoglobulin molecule of claim 45, wherein said immunoglobulin molecule is fully human.

56. (New) The immunoglobulin molecule of claim 45, wherein said immunoglobulin molecule is recombinant.

57. (New) An immunoglobulin molecule according to claim 45 that binds to A34 and is conjugated to at least one anti-cancer agent.

58. (New) The immunoglobulin molecule according to claim 57, wherein said anti-cancer agent is selected from the group consisting of radioisotopes, chemotherapeutic agents, cytotoxic agents and combinations thereof.

59. (New) The immunoglobulin molecule according to claim 58, wherein said anti-cancer agent is a radioisotope selected from the group consisting of $^{125}I$, $^{131}I$, $^{99}Tc$, $^{90}Y$ and $^{111}In$.

60. (New) The immunoglobulin molecule according to claim 57, wherein said anti-cancer agent comprises a chemotherapeutic agent or cytotoxic agent selected from the group consisting of QFA, antifolates, BCNU (carmustine), mercaptopurine, methotrexate, docetaxel, adriamycin, calicheamicin cellular toxin, bacterial toxin, pseudomonas exotoxin, ricin, diptheria toxin and combinations thereof.

61. (New) The substantially pure immunoglobulin molecule according to claim 45, where the immunoglobulin molecule binds to an extracellular portion of A34.

62. (New) A composition, comprising a therapeutically effective amount of the molecule of claim 46 and at least one pharmaceutically acceptable carrier.

63. (New) A composition, comprising a therapeutically effective amount of an immunoglobulin according to claim 46 that binds to A34 and is conjugated to an anti-cancer agent, and at least one pharmaceutically acceptable carrier.

64. (New) The immunoglobulin molecule of claim 46, wherein said immunoglobulin molecule is humanized.

65. (New) The immunoglobulin molecule of claim 46, wherein said immunoglobulin molecule is fully human.

66. (New) The immunoglobulin molecule of claim 46, wherein said immunoglobulin molecule is recombinant.

67. (New) An immunoglobulin molecule according to claim 46 that binds to A34 and is conjugated to at least one anti-cancer agent.

68. (New) The immunoglobulin molecule according to claim 67, wherein said anti-cancer agent is selected from the group consisting of radioisotopes, chemotherapeutic agents, cytotoxic agents and combinations thereof.

69. (New) The immunoglobulin molecule according to claim 68, wherein said anti-cancer agent is a radioisotope selected from the group consisting of $^{125}I$, $^{131}I$, $^{99}Tc$, $^{90}Y$ and $^{111}In$.

70. (New) The immunoglobulin molecule according to claim 67, wherein said anti-cancer agent comprises a chemotherapeutic agent or cytotoxic agent selected from the group consisting of QFA, antifolates, BCNU (carmustine), mercaptopurine,

methotrexate, docetaxel, adriamycin, calicheamicin cellular toxin, bacterial toxin, pseudomonas exotoxin, ricin, diptheria toxin and combinations thereof.

71. (New) The substantially pure immunoglobulin molecule according to claim 46, where the immunoglobulin molecule binds to an extracellular portion of A34.

72. (New) A composition, comprising a therapeutically effective amount of the molecule of claim 47 and at least one pharmaceutically acceptable carrier.

73. (New) A composition, comprising a therapeutically effective amount of an immunoglobulin according to claim 46 that binds to A34 and is conjugated to an anti-cancer agent, and at least one pharmaceutically acceptable carrier.

74. (New) The immunoglobulin molecule of claim 47, wherein said immunoglobulin molecule is humanized.

75. (New) The immunoglobulin molecule of claim 47, wherein said immunoglobulin molecule is fully human.

76. (New) The immunoglobulin molecule of claim 47, wherein said immunoglobulin molecule is recombinant.

77. (New) An immunoglobulin molecule according to claim 47 that binds to A34 and is conjugated to at least one anti-cancer agent.

78. (New) The immunoglobulin molecule according to claim 77, wherein said anti-cancer agent is selected from the group consisting of radioisotopes, chemotherapeutic agents, cytotoxic agents and combinations thereof.

79. (New) The immunoglobulin molecule according to claim 78, wherein said anti-cancer agent is a radioisotope selected from the group consisting of $^{125}I$, $^{131}I$, $^{99}Tc$, $^{90}Y$ and $^{111}In$.

80. (New) The immunoglobulin molecule according to claim 77, wherein said anti-cancer agent comprises a chemotherapeutic agent or cytotoxic agent selected from the group consisting of QFA, antifolates, BCNU (carmustine), mercaptopurine, methotrexate, docetaxel, adriamycin, calicheamicin cellular toxin, bacterial toxin, pseudomonas exotoxin, ricin, diptheria toxin and combinations thereof.

81. (New) The substantially pure immunoglobulin molecule according to claim 47, where the immunoglobulin molecule binds to an extracellular portion of A34.